Amendments to the claims (this listing replaces all prior versions):

1. (previously amended) A method of starting an internal combustion engine, wherein the engine includes a plurality of cylinders each containing a piston which is mechanically connected to a crankshaft, and wherein the engine is configured to operate with a predefined normal firing order, the method comprising:

selecting at a cylinder for initial firing, selection of the cylinder based upon the piston of the cylinder being located in a predetermined position along its stroke;

injecting fuel into the selected cylinder to create an uncompressed fuel-air mixture;

igniting the uncompressed fuel-air mixture in the selected cylinder;

repeating selecting, injecting and igniting after said initial selecting, injecting and igniting until there is sufficient kinetic energy to complete a compression stroke in at least one of the cylinders, the selecting being made as a function of cylinder piston position without regard to normal firing order; and

after completion of a compression stroke, firing the cylinders according to the predefined normal firing order.

2. (original) The method of claim 1 further comprising:

adjusting a dynamic compression ratio of the selected cylinder by adjusting valve event parameters of the selected cylinder prior to firing the cylinder according to the normal firing order.

3. (original) The method of claim 1, wherein the predetermined piston position of the cylinder selected for initial firing is a position where the piston has sufficient mechanical advantage to rotate the crankshaft through at least 180 degrees in response to igniting the mixture in the first selected cylinder.

4. (original) The method of claim 3, wherein the predetermined piston position of the cylinder selected for initial firing is a position selected to have sufficient mechanical advantage to rotate the crankshaft in a counter-clockwise direction.

5. (original) The method of claim 3, wherein the predetermined piston position of the cylinder selected for initial firing is a position selected to have sufficient mechanical advantage to rotate the crankshaft in a clockwise direction.

6. (original) The method of claim 3 wherein the predetermined piston position of the cylinder selected for initial firing is in a range between 25 and 155 crankshaft degrees after top dead center.

7. (original) The method of claim 1, wherein after igniting the cylinder selected for initial firing, the piston of the selected cylinder moves towards bottom dead center.

8. (original) The method of claim 7 further comprising:

opening an exhaust valve when piston moves away from bottom dead center toward top dead center.

9. (original) The method of claim 8, wherein the exhaust valve remains open until the piston reaches approximately top dead center.

10. (original) The method of claim 1 further comprising:

selecting a plurality of cylinders for initial firing, selection of each cylinder based upon the piston of the respective cylinder being located in a predetermined position along its stroke.

11. (original) The method of claim 1 further comprising:

prior to firing the cylinder selected for initial firing, closing an intake valve.

12. (original) The method of claim 11 further comprising:

prior to firing the cylinder selected for initial firing, closing an exhaust valve.

13. (original) The method of claim 1, wherein the fuel is injected to form a combustible mixture with a fuel/air ratio approximately stoichiometric.

14. (original) The method of claim 1, wherein the fuel is injected via direct injection into the selected cylinder from an associated injector.

15. (original) The method of claim 1, wherein the engine is configured to normally operate on a four-stroke combustion cycle.

16. (original) The method of claim 1 further comprising:

before igniting the uncompressed fuel-air mixture in a selected cylinder, opening an intake valve to introduce a fresh charge into the selected cylinder.

17. (original) The method of claim 1 wherein said selecting, injecting and igniting occurs while the cylinders are fired according to the predefined normal firing order.

18-48. (canceled).

49. (currently amended) An internal combustion engine comprising:

a plurality of cylinders, each housing a piston attached to a crankshaft;

an intake valve that controls the intake of air into the cylinder;

an exhaust valve that controls the expulsion of air from the cylinder;

an intake valve actuator that controls operation of the intake valve;

an exhaust valve actuator that controls operation of the exhaust valve; and

a starting module that identifies at least one cylinder with piston in a predetermined position range, selects the identified cylinder independently of the normal operating stroke cycles, and fires the identified cylinder,

~~The engine of claim 48~~ wherein the starting module is configured to start the engine in forward or reverse.

50. (previously amended) A method of starting a four-stroke internal combustion engine from rest, wherein the engine includes a plurality of cylinders each containing a piston, the method comprising:

operating a first number of the plurality of cylinders in a two-stroke cycle that does not compress fuel-air mixture prior to combustion; and

after sufficient kinetic energy has accumulated in the engine to complete a compression stroke, then operating simultaneously with the first number a second number of the plurality of cylinders in a normal four-stroke cycle.

51. (original) The method of claim 50 further comprising:

ceasing operation of a first number of cylinders in the two-stroke cycle while continuing operation of a second number of cylinders in a normal four-stroke cycle.

52. (original) The method of claim 50 wherein the two stroke cycle includes a first stroke that introduces a fresh charge and a second stroke that releases combustion residue.